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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Complete If Known

Application Number	10/705,391
Filing Date	11/10/03
First Named Inventor	HUGHES, JOY VANNELIA, et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	018563-005910US

U.S. PATENT DOCUMENTS					
Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant or Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	US-3,680,900	05-1972	Andrews	
	AB	US-3,680,803	01-1975	Levine	
	AC	US-4,755,138	07-1988	Abbatte et al.	
	AD	US-4,788,534	01-1989	Breads	
	AE	US-4,837,732	06-1989	Brandestini et al.	
	AF	US-4,858,891	08-1989	Breads et al.	
	AG	US-4,936,882	08-1990	Walker et al.	
	AH	US-5,035,813	07-1991	Breads et al.	
	AI	US-5,055,039	10-1991	Abbatte et al.	
	AJ	US-5,059,118	10-1991	Breads et al.	
	AK	US-5,139,419	08-1992	Andreiko et al.	
	AL	US-5,188,623	02-1993	Breads et al.	
	AM	US-5,273,428	12-1993	Rekow et al.	
	AN	US-5,338,198	08-1994	Wu et al.	
	AO	US-5,340,309	08-1994	Robertson	
	AP	US-5,342,202	08-1994	Dashayes	
	AQ	US-5,388,478	11-1994	Andreiko et al.	
	AR	US-5,382,184	01-1995	Stern	
	AS	US-5,395,238	03-1995	Andreiko et al.	
	AT	US-5,431,562	07-1995	Andreiko et al.	
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	AV	US-5,452,210	09-1995	Dehoff et al.	
	AW	US-5,454,717	10-1995	Andreiko et al.	
	AX	US-5,474,448	12-1995	Andreiko et al.	
	AY	US-5,533,895	07-1996	Andreiko et al.	
	AZ	US-5,549,476	08-1996	Stern	
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	BB	US-5,605,459	02-1997	Kuroda et al.	
	BC	US-5,807,305	03-1997	Andersson et al.	
	BD	US-5,845,421	07-1997	Slootsky	
	BE	US-5,851,115	12-1998	Carlsson et al.	
	BF	US-5,975,893	11-1998	Chishti et al.	
	BG	US-6,371,761	04-2002	Cheang et al.	

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SignatureDate
Considered

3-21-06

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Examiner Name	Unassigned
Attorney Docket Number	018563-005910US

U.S. PATENT DOCUMENTS					
Examiner	Cite No. ¹	Document Number Number Kind Code ² (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear

FOREIGN PATENT DOCUMENTS					
Examiner Initials ³	Cite No. ¹	Foreign Patent Document Country Code ³ Number ⁴ Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
					T ⁶

NON PATENT LITERATURE DOCUMENTS					
Examiner Initials ⁷	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			T ²
	BH	AFTOSMIS, "Intersection of Generally Positioned Polygons in R ³ " Downloaded from web on 08/17/2000 << http://george.arc.nasa.gov/~aftosmis/carl3d/tool_intersection.htm >> pp. 1-4.			
	BI	AFTOSMIS, "Tie-breaking, Degeneracies and Floating Point Arithmetic" Downloaded from web on 04/28/1999 << http://george.arc.nasa.gov/~aftosmis/carl3d/degeneracy/degeneracy.htm >> pp. 1-2.			
	BJ	BOHM et al., "A survey of curve and surface methods in CAGD" Computer Aided Geometric Design (1984) 1:1-60.			
	BK	CHIAPPONE, "Constructing the Gnathologic Setup and Positioner" JCO, (02/1980) Vol. XIV No. 2, pp. 121-133.			
	BL	COTTINGHAM, "Gnathologic Clear Plastic Positioner" Am. J. Orthodontics, (01/1969) Vol. 55 No. 1, pp. 23-31.			
	BM	CURETON, "Correcting Malaligned Mandibular Incisors with Removable Retainers" J. Clin. Orthodon. (1998) 30:390-395.			
	BN	EDELSBRUNNER et al., "Simulation of Simplicity: A Technique to Cope with Degenerate Cases in Geometric Algorithms" ACM Transactions on Graphics (1990) 9(1):69-104.			
	BO	KESLING, "The Philosophy of the Tooth Positioning Appliance" Am J. Orthod. Oral Surg. (06/1945) Vol. 31, No. 8 pp. 297-304.			

Examiner Signature		Date Considered	3-21-06
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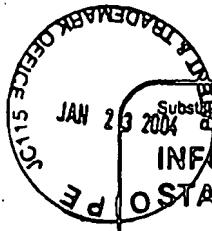
¹EXAMINER: initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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Filing Date	11/10/03
First Named Inventor	HUGHES, JOY VANNELIA, et. al.
Art Unit	Unassigned
Examiner Name	Unassigned
Attorney Docket Number	018583-005910US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BP	KESLING, "Coordinating the Predetermined Pattern and Tooth Positioner with Conventional Treatment" Am. J. Orthod. Oral Surg., (1948) 32:285-293.	
	BQ	KLEEMAN et al., "The Speed Positioner" JCO (12/1998) Vol. XXX, No. 12, pp. 673-680.	
	BR	KURODA et al., "Three-Dimensional Dental Cast Analyzing System Using Laser Scanning" Am. J. Orthod. Dent. Orthop. (10/1998) Vol. 110, No. 4, pp. 365-369.	
	BS	"Adapting Vacuum Thermoforming Machines for Essix™" http://www.essix.com/magazine/default.htm , 08/13/1997.	
	BT	SHILLIDAY, "Minimizing Finishing Problems with the Mini-Positioner" Am. J. Orthodontics, (1971) 59:588-599.	
	BU	Tru-Tain Orthodontic & Dental Supplies, AAOF Case Partner (1980)	
	BV	WARUNEK, et al., "Clinical Use of Silicone Elastomer Appliances" JCO (10/1988) Vol. XXII, No. 10, pp. 694-700.	
	BW	WELLS, "Application of the Positioner Appliance in Orthodontic Treatment" Am. J. Orthodont (10/1970) Vol. 58, No. 4, pp. 351-366.	

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Examiner Signature		Date Considered	3-21-04
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This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449A/PTO				Complete If Known	
				Application Number	10/705,391
				Filing Date	November 10, 2003
				First Named Inventor	Hughes, Joy Vannella
				Art Unit	3732
				Examiner Name	Manahan, Todd E.
Sheet	1	of	2	Attorney Docket Number	018563-005910US

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number Number Kind Code ² (If known)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
<i>[Signature]</i>	1	6,318,994 B1	11-20-2001	Chishti et al.	
<i>[Signature]</i>	2	6,463,344 B1	10-08-2002	Pavloskaia et al.	
<i>[Signature]</i>	3	6,608,628	08-19-2003	Ross et al.	

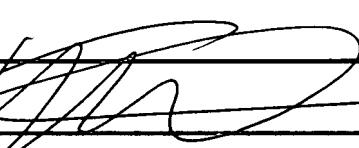
FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No. ¹	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	
		Country Code ³	Number ⁴	Kind Code ⁵ (If known)			
<i>[Signature]</i>	4	PCT	WO 98/58,596	A1	12-30-1998	Chishti et al.	<input type="checkbox"/>

Examiner Signature	<i>[Signature]</i>	Date Considered	4-18-09
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Substitute for form 1449B/PTO				Complete If Known	
				<i>Application Number</i>	10/705,391
				<i>Filing Date</i>	November 10, 2003
				<i>First Named Inventor</i>	Hughes, Joy Vannelia
				<i>Art Unit</i>	3732
				<i>Examiner Name</i>	Manahan, Todd E.
Sheet	2	of	2	<i>Attorney Docket Number</i>	018563-005910US

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	5	"Intersection of Generally Positioned Polygons in R ³ ," (August 17, 2000), < http://george.arc.nasa.gov/~afosmisi/cart3d/bool_Intersection.html >, pages 1-4.	<input type="checkbox"/>
	6	"Tie-Breaking, Degeneracies, and Floating Point Arithmetic," (April 28, 1999), < http://george.arc.nasa.gov/~afosmisi/cart3d/degeneracy/degeneracy.html >, pages 1 and 2.	<input type="checkbox"/>
	7	EDELSBRUNNER and MUCKE, "Simulation of Simplicity: A Technique to Cope with Degenerate Cases in Geometric Algorithms," <i>ACM Transactions on Graphics</i> 9:66-104 (1990).	<input type="checkbox"/>
	8	BÖHM W., et al., "A Survey of Curve and Surface Methods on CAGD," <i>Computer Aided Geometric Design</i> 1, pp. 1-60 (1984).	<input type="checkbox"/>
	9	STRANG G., <i>Linear Algebra and Its Applications</i> , 3rd Ed., Saunders College Publishing. (February 10, 1988)	<input type="checkbox"/>
	10	PRESS W., et al., "Numerical Recipes in C," <i>Dr. Dobb's Journal</i> . (October 30, 1992)	<input type="checkbox"/>

Examiner Signature		Date Considered	4-18-07
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